

REMARKS

By the above amendment, independent claims 5, 6 and 16, have been amended to clarify features of the present invention with claim 2 being canceled without prejudice or disclaimer of the subject matter thereof and new dependent claims 25 - 30 being added.

Reference is made to Figure 8 of the drawings of this application which illustrates a display screen having a map display portion 55 and an adjacent image display portion 56 on the same display screen. In accordance with the present invention, as described at pages 13 and 14 of the specification of this application, the location on a substrate or wafer of each detected defect is displayed on the screen in a map format, the defect candidate location data as represented by the circles and rectangles in Fig. 8 corresponding to the defect map 207 of Fig. 4 and the defect map of Fig. 6. The present invention as shown in Fig. 8 enables selection of a defect candidate image from outputted images of extracted defect candidates to be displayed by locating a current location symbol 59 on the defect map at a position corresponding to an image defect candidate and the image of a defect that a user wishes to see is displayed on the image display portion 56 by clicking on the location of the defect to be viewed and therewith, in the image display portion, an image of the selected defect candidate corresponding to the designated located on the map format display is simultaneously displayed in the image display portion 56, that is, an image of the defect candidate at the current location symbol 59 although no such image display is illustrated in Fig. 8. Applicants submit that such image display would correspond to an image display of the type as illustrated in Figs. 2A-2D of Mizuno, for example. As such, in accordance with the present invention, as now recited in the independent claims of this application, two different types of display appear together or simultaneously on the display screen in which one display is a display in map format of the defect candidate location data and another display is a

display of an image of a defect candidate selected from the outputted images of the extracted defect candidates corresponding to location data designated on the map format displayed on the screen. Applicants submit that such features are not disclosed or taught in the cited art as will become clear from the following discussion.

The rejection of claims 2 - 3, 5 - 6 and 12 - 16 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 6,047,083, issued to Mizuno, and the rejection claims 10 - 11 and 20 - 24 under 35 U.S.C. §103(a) as being unpatentable over Mizuno and further in view of U.S. Patent No. 6,539,106, issued to Gallarda et al, such rejections are traversed insofar as they are applicable to the present claims, and reconsideration and withdrawal of the rejections are respectfully requested.

As to the requirements to support a rejection under 35 U.S.C. 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

With regard to the requirements to support a rejection under 35 USC 103, As to the requirements to support a rejection under 35 USC 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court

pointed out that the PTO has the burden under '103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

In applying Mizuno to the claimed invention, the Examiner refers to MPEP 2111 which states that claims are to be given their broadest reasonable interpretation consistent with the specification and contends that "Mizuno discloses designating the defect candidate location data in a wafer map at the same time as displaying an image of the defect, which results from the classification (col. 7, lines 18 - 30). The language of the claim does not exclude an "image of defect" being a representation of the defect as depicted in Fig. 6b" (emphasis added). Contrary to the position set forth by the Examiner, applicants note that in accordance with the disclosure of Mizuno, Fig. 6A thereof shows specified points of defects in a map format on a wafer and Fig. 6B shows the type of defect in accordance with the classification thereof, and applicants submit that irrespective of the position set forth by the Examiner, the type of defect as represented by the numbers in rectangles or triangles at the specified locations in the map format as shown in Fig. 6B of Mizuno does not represent an image of the defect. More particularly, column 7, lines 18 - 30 of Mizuno specifically points out that Fig. 6A shows the specified points to be inspected on the wafer map and Fig. 6B shows the result of the defect classification (as shown, for example, in Figs. 4 and 5) overwritten on the specified points to be inspected on the wafer map. As described throughout Mizuno and in particular, in column 6, lines 37 - 44, "An image signal is converted into a digital signal by means of the A/D converter 21. The signal is then subjected to such image processing as noise removal by the processor 22 and stored into the image memory 23. The image stored in the image memory 23 is read out onto the display through the processor 22 and, at the same time, subjected to the defect classification ... the result of the classification is overwritten on the specified point to be inspected on the wafer map and also stored in an inspection database." (emphasis added). Thus, it is apparent that Mizuno makes a distinction between an image and a result of classification of the defect, and applicants submit that the Examiner's position is

improper in that the number in a rectangle or triangle in a "result classification" and not "an image of a defect". In any event, by the present amendment, each of independent claims 5, 6 and 16 now recite the feature of displaying together with the map format on the screen an image of a defect candidate selected from the outputted images of the defect candidates or extracted defect candidates with the displayed image of the defect candidate being displayed corresponding to location data designated on the map format displayed on the screen. Irrespective of the position by the Examiner, Mizuno does not disclose in the sense of 35 USC 102 or teach in the sense of 35 USC 103 displaying on the screen both the map format showing location data of defects or defect candidates and an image of a defect candidate selected from outputted image of the defect candidate corresponding to location data designated on the map format on the screen. Applicants submit that the issue is not whether a screen could be constructed and a method or apparatus provided for displaying the map format and the image, as defined in the independent and dependent claims of this application, but the issue is whether Mizuno provides a disclosure or teaching of such claimed features. Applicants submit that it is apparent that Mizuno fails to disclose or teach the recited features of independent claims 5, 6 and 16 and therewith the dependent claims in the sense of 35 USC 102 and 35 USC 103 such that all claims should be considered allowable thereover.

With respect to the dependent claims, applicants note that newly added dependent claims 25 - 30 further define the simultaneous display or together display as simultaneously displaying the map format and the image of the selected defect candidate at one and another portions of the display screen which portions are adjacent portions of the screen which is clearly not disclosed or taught by the cited art. The other dependent claims recite further features not disclosed or taught by Mizuno taken alone or in combination with Gallarda et al in the sense of 35 USC 103 and all claims patentably distinguish thereover.

As to Gallarda et al, irrespective of the position set forth by the Examiner, this reference also fails to disclose the display on the same display screen of the map format and the image in the manner set forth such that Gallarda et al fails to overcome the deficiencies of Mizuno as pointed out above. Thus, all claims patentably distinguish over this proposed combination of references and should be considered allowable thereover.

In view of the above amendments and remarks, applicants submit that all claims present in this application should now be in condition for allowance and issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (501.41125X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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